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ARS-33-35

United States Department of Agriculture Agricultural Research Service

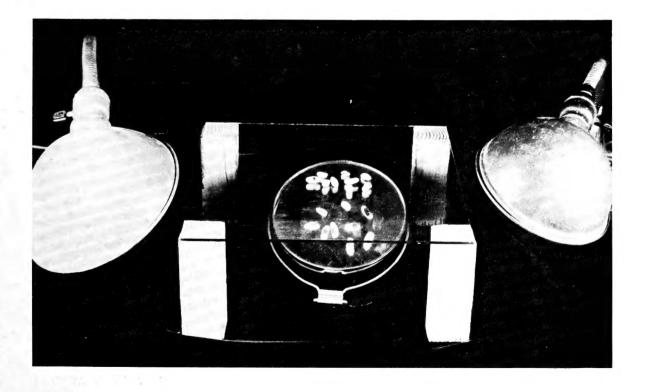
A SIMPLE DEVICE FOR DETERMINING INSECT DAMAGE TO SEEDS

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A simple device for determining insect damage to seeds is described, which is inexpensive and easy to use, and speeds the examination of large vegetable seeds, such as beans, corn, and peas. Since the operator can see both sides of the seeds at once, he does not have to roll them.

A pane of window glass 15 to 18 inches square is set on three or four wooden legs $1\frac{1}{2}$ inches square and 4 or 5 inches long, or on suitable wide-mouthed glass bottles. A small household magnifying mirror $5\frac{1}{2}$ inches in diameter, mounted in a wire holder with a simple wire base, is placed under the glass and swiveled until its surface is at



about a 30-degree angle with the pane of glass, as shown in the figure. Table or desk lamps with flexible arms are placed close to the glass pane and adjusted to give maximum light and a minimum of shadow on the material being examined.

The sample of seeds for examination is placed on top and to the rear of the glass pane. Several seeds may be examined at a time by glancing at the top side on the glass and at the mirror image, which shows the underside. As each group is examined, it is raked off the glass with a plastic straightedge through a funnel into a suitable container.

This method has been used for the last 3 years at the Twin Falls, Idaho, field station, where 638,000 beans have been examined to determine the percentage "chewed" in samples taken from chemically treated plots in tests for the control of the western bean cutworm (Loxagrotis albicosta (Sm.)).

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